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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,763	04/06/2001	Gary Seim	1275.8US01	7384

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EXAMINER

BRADFORD, RODERICK D

ART UNIT	PAPER NUMBER
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3762

DATE MAILED: 02/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/827,763

Applicant(s)

SEIM ET AL.

Examiner

Roderick Bradford

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 and 37-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-11, 15-18, 21-25, 37 and 40 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 12-14, 19, 20, 26-28, 38, 39 and 41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed January 16, 2004 have been fully considered but they are not persuasive.

Warman waits/delays to deliver atrial therapy until atrial tachyarrhythmia is detected and therefore meets the claimed limitation of "delaying atrial tachyarrhythmia until.....declared. In addition the claims do not contain a limitation to declaring an atrial episode and then delaying the therapy but only delays therapy until atrial tachyarrhythmia is declared/detected. Finally since circuitry is used in Warman there is inherently some amount of delay (microseconds, nanoseconds, milliseconds, etc) after atrial tachyarrhythmia is detected before therapy is delivered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4, 7, 8, 15, 16, 18, 21, 22 and 37, 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Warman et al. U.S. Patent No. 5,840,079.

Referring to claims 1, 15 and 37, Warman discloses a body implantable system comprising:

- At least one lead comprising an atrial electrode for sensing and pacing an atrium of a heart (column 3, lines 17-18)

Art Unit: 3762

- A detector that detects high atrial interval rates indicative of atrial arrhythmia (column 1, lines 61-63)
- Memory configured to define an atrial window having a first length and a first satisfaction criterion (column 4, lines 39-53)
- A control circuit inhibiting the energy delivery circuitry from delivering pacing signal to the atrium in response (column 9, lines 60-65) and wherein the detector detects atrial intervals while delivery of the pacing signals to the atrium is inhibited (column 9, lines 60-65), classifying the atrial intervals in the atrial window and declaring an atrial episode in response to satisfying the atrial window by evaluating the atrial intervals (Fig. 6).

Referring to claims 2 and 16, wherein the control circuit inhibits delivery of the pacing signals in response to detecting high atrial rates indicative of atrial flutter (column 5, lines 57-63).

Referring to claims 4 and 18, wherein the control circuit inhibits delivery of the pacing signals to the atrium after ceasing of the high atrial interval rates indicative of atrial arrhythmia (column 9, lines 61-65).

Referring to claims 7 and 21, wherein the control circuit inhibits delivery of the pacing signals to cause an increase in a rate of atrial window satisfaction (column 9, lines 61-65)

Art Unit: 3762

Referring to claims 8, 22 and 40, wherein the control circuit enables delivery of the pacing signals to the atrium after ceasing of high atrial rates indicative of atrial arrhythmia (column 10, lines 4-9).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 3, 9, 10, 11, 17, 23, 24 and 25 rejected under 35 U.S.C. 103(a) as being unpatentable over Warman et al. U.S. Patent No. 5,840,079.

Referring to claims 3 and 17, Warman discloses the claimed invention except for wherein the control circuit inhibits delivery of the pacing signals in response to detecting high atrial intervals rates of at least about 130 bpm. It would have been an obvious

Art Unit: 3762

matter of design choice to one skilled in the art to modify system and method of Warman to include a control circuit that inhibits delivery of the pacing signals in response to detecting high atrial intervals rates of at least about 130 bpm since the applicant has not disclosed that a control circuit that inhibits delivery of the pacing signals in response to detecting high atrial intervals rates of at least about 130 bpm provides any criticality and/or unexpected results and it appears that the invention would perform equally well with any control circuit that inhibits delivery of pacing signals in response to detecting high atrial interval rates such as the control circuit which inhibits delivery pacing signals in response to high atrial interval rates such as taught by Warman as a mean of treating atrial fibrillation.

Referring to claims 9 and 23, Warman discloses the claimed invention except for wherein the atrial window length is defined by a number of atrial interval samples ranging between about 20 and 60 atrial samples. It would have been an obvious matter of design choice to one having ordinary skill in the art to modify the system and method of Warman to include an atrial window length that is defined by a number of atrial interval samples ranging between about 20 and 60 atrial interval samples, since the applicant has not disclosed that an atrial window length that is defined by a number of atrial interval samples ranging between about 20 and 60 atrial interval samples provides any criticality and/or unexpected results and it appears that the invention would perform equally well with any atrial window that is defined by a number of atrial interval samples such as the atrial window as taught by Warman as a means of efficiently tracking atrial intervals so as to receive accurate information regarding heart activity.

Art Unit: 3762

Referring to claims 10 and 24, Warman discloses the claimed invention except for wherein the satisfaction criterion represents a predetermined number, percentage or ratio of atrial intervals classified by the control circuit as fast atrial intervals relative to the atrial window length. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system and method as taught by Warman, with wherein the satisfaction criterion represents a predetermined number, percentage or ratio of atrial intervals classified by the control circuit as fast atrial intervals relative to the atrial window length since it was well known in the art to include a satisfaction criterion that represents a predetermined number, percentage or ratio of atrial intervals classified by the control circuit as fast atrial intervals relative to the atrial window length as a means to more efficiently keep track of atrial intervals.

Referring to claims 11 and 25, Warman discloses the claimed invention except for wherein the first satisfaction criterion represents about 80 percent of the atrial intervals classified by the control circuit as fast atrial intervals. It would have been an obvious matter of design choice to one skilled in the art to modify the system and method of Warman to include wherein the first satisfaction criterion represents about 80 percent of the atrial intervals classified by the control circuit as fast atrial intervals, since the applicant has not disclosed that having a first satisfaction criterion that represents about 80 percent of the atrial intervals classified by the control circuit as fast atrial intervals provides any criticality and/or unexpected results and it appears that the invention would perform equally well with any first satisfaction criterion such as the satisfaction criterion as taught by Warman.

Art Unit: 3762

Allowable Subject Matter

7. Claims 5, 6, 12-14, 19, 20, 26-28, 38, 39 and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gilkerson et al. U.S. Patent No. 6,493,579.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roderick Bradford whose telephone number is (703) 305-3287. The examiner can normally be reached on Monday - Friday 7 a.m. - 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (703) 308-5181. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.


R.B.



**ANGELA D. SYKES
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